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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/779,751	02/09/2001	Toshio Yamada	60188-028	5852

7590 10/28/2003

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EXAMINER

VO, LILIAN

ART UNIT	PAPER NUMBER
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2127

DATE MAILED: 10/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



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Office Action Summary

Application No.

09/779,751

Applicant(s)

YAMADA, TOSHIO

Examiner

Lilian Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-11, 21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-11, 21 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2, 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. Claims 6 – 11 and 21 - 22 are presented for examination.

Election/Restrictions

2. Claims 5, 12 - 16 and 19 – 20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 6.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites the limitation "said room" in lines 8 and 11, page 24 . There is insufficient antecedent basis for this limitation in the claim.

For the purpose of the examination, the Examiner will assume it is referring to the memory space.

Correction is required to overcome this type of rejection.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 6 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Nishio (US 6,292,202 B1).

Regarding **claim 6**, Nishio discloses a data processing method comprising the steps of:

writing data to be processed in a predetermined area within a memory space of a semiconductor device having a data processing function and serving as a memory (col. 2, lines 6 – 20);

processing said data by said semiconductor device and writing resultant processed data in said predetermined area or another predetermined area within the memory space (col. 2, lines 6 – 20); and

obtaining said resultant processed data by reading said predetermined area or said another predetermined area within the memory space of said semiconductor device after writing said resultant processed data (abstract, col. 14, lines 60 – 65, col. 17, lines 1 – 12).

Regarding **claim 7**, Nishio discloses a data processing method using a data processor including a controller and a semiconductor device having a data processing function and serving as a memory (abstract, col. col. 2, lines 6 – 20, col. 5, lines 31 – 37),

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wherein said controller writes specification information of a processing to be executed in a first area within a room of said semiconductor device and writes data to be processed in a second area within said room (col. 2, lines 6 – 20),

said semiconductor device subsequently processes said data written in said second area on the basis of said processing specification information written in said first area within said room, and writes resultant processed data in a third area within said room (col. 2, lines 6 – 20), and

said controller reads said resultant processed data from said third area within said room (col. 5, lines 31 – 37, col. 6, lines 8 – 12 and fig. 16).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishio (US 6,292,202 B1) in view of Van Doren et al. (US 5,761,731, hereafter referred to as Van Doren).

Regarding **claim 8**, although Nishio discloses the data processing method of claim 7, he did not clearly mention the second area and third area are the same area and that resultant processed data is overwritten in the second area. Nevertheless, Van Doren teaches of the processing data and the resultant processed data areas are of the same area and that the resultant processed data is being overwritten in the second area of the memory (col. 9, lines 46 – 53).

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Therefore, it would have been obvious for one of ordinary skill in the art, at the time the invention was made to incorporate these features of Van Doren's invention to Nisho's system to guarantee data coherency in a system where multiple nodes require atomic transactions (col. 3, lines 21 – 23).

Regarding **claim 11**, although Nishio discloses the data processing method of claim 7, except the additional limitation as claimed. Nevertheless, Van Doren discloses a data processing system, in which immediately before executing said processing by said semiconductor device having the data processing function, information describing said processing to be executed is dynamically rewritten for executing said processing (col. 9, lines 45 – 58 and fig. 4). Therefore, it would have been obvious for one of ordinary skill in the art, at the time the invention was made to incorporate these features of Van Doren's invention to Nisho's system to guarantee data coherency in a system where multiple nodes require atomic transactions (col. 3, lines 21 – 23).

9. Claims 9, 10 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishio (US 6,292,202 B1) in view of Satou et al. (US 5,717,946, hereafter referred to Satou).

Regarding **claim 9**, although Nishio discloses the data processing method of claim 7, except the additional limitation as claimed. Nevertheless, Satou discloses a data processing system

wherein said controller reads time information required for said processing to be executed (col. 42, lines 39 – 61, col. 47, lines 4 – 63 and col. 49, lines 9 – 33, and fig. 38, 39 and 44), and reads said resultant processed data written in said third area within said room on the basis of said

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read time information after time corresponding to said time information elapses (col. 42, lines 23 – 46).

Therefore, it would have been obvious for one of ordinary skill in the art, at the time the invention was made to incorporate the feature in Satou's system to Nishio's invention so that the instructions are processed as high speed by burst transferred between a CPU and a memory (col. 1, lines 11 – 13).

Regarding **claim 10**, although Nishio discloses the data processing method of claim 9, wherein said semiconductor device is connected with said controller through a memory network (fig. 3), except storing time information required for each processing to be executed by the semiconductor device.

Nevertheless, Satou discloses a data processing system with a table that stores time information required for each processing to be executed (fig. 44). Therefore, it would have been obvious for one of ordinary skill in the art, at the time the invention was made to incorporate this feature to Nishio's invention to enhance the system performance with the provided timing information.

Regarding **claim 21**, Nishio discloses the data processing system method of claim 10, wherein said memory network has a bus structure (fig. 3).

22. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishio (US 6,292,202 B1) in view of Satou et al. (US 5,717,946, hereafter referred to Satou) and further in view of Sandberg (US 5,592,625).

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Regarding **claim 22**, although the combined reference of Nishio and Satou discloses the data processing system method of claim 10, except wherein the memory network has a ring network structure. Nevertheless, the reference of Sandberg mentions the memory network with a ring network structure (col. 3, line 54 – col. 4, line 7). Therefore, it would have been obvious for one of ordinary skill in the art, at the time the invention was made to incorporate a ring network structure to the combined system of Nishio and Satou to span larger distance in their network.

Conclusion

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lilian Vo whose telephone number is 703-305-7864.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Lilian Vo
Examiner
Art Unit 2127

lv
August 8, 2003


MAJID BANANKHAH
PRIMARY EXAMINER